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<110> ENKAM Pharmaceuticals A/S

<120> NCAM binding compounds

<130> 12596/P66506US0

<140> US 09/787, 443

<141> 2001-07-30

<160> 50

<170> PatentIn version 3.1

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Ala Ser Lys Lys Pro Lys Arg Asn Ile Lys Ala
1 5 10

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Ala Lys Lys Glu Arg Gln Arg Lys Asp Thr Gln
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Ala	Arg	Ala	Leu	Asn	Trp	Gly	Ala	Lys	Pro	Lys
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Ala	Gly	Ser	Ala	Val	Lys	Leu	Lys	Lys	Lys	Ala
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Ala	Lys	Tyr	Val	Leu	Ile	Pro	Ile	Arg	Ile	Ser
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Ala Ser Thr Lys Arg Ser Met Gln Gly Ile

1 5 10

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Ala Arg Arg Ala Ile Leu Met Xaa Ala Leu
1 5 10

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Ala Tyr Tyr Leu Ile Val Arg Val Asn Arg Ile
1 5 10

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Ala Thr Asn Lys Lys Thr Gly Arg Arg Pro Arg

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Ala Lys Arg Asn Gly Pro Leu Ile Asn Arg Ile
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Ala Lys Arg Ser Val Gln Lys Leu Asp Gly Gln
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Ala Arg Gln Lys Thr Met Lys Pro Arg Arg Ser
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Ala	Gly	Asp	Tyr	Asn	Pro	Asp	Leu	Asp	Arg
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Ala	Arg	Lys	Thr	Arg	Glu	Arg	Lys	Ser	Lys	Asp
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Ala	Ser	Gln	Ala	Lys	Arg	Arg	Lys	Gly	Pro	Arg
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<400> 16

Ala Pro Lys Leu Asp Arg Met Leu Thr Lys Lys
1 5 10

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<400> 17

Ala Lys Lys Glu Lys Pro Asn Lys Pro Asn Asp
1 5 10

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<400> 18

Ala Gln Met Gly Arg Gln Ser Ile Asp Arg Asn
1 5 10

<210> 19
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<400> 19

Ala Glu Gly Gly Lys Lys Lys Lys Met Arg Ala
1 5 10

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<400> 20

Ala	Lys	Lys	Lys	Glu	Gln	Lys	Gln	Arg	Asn	Ala
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Ala	Lys	Ser	Arg	Lys	Gly	Asn	Ser	Ser	Leu	Met
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Ala	Arg	Lys	Ser	Arg	Asp	Met	Thr	Ala	Ile	Lys
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Gly	Arg	Ile	Leu	Ala	Arg	Gly	Glu	Ile	Asn	Phe	Lys
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Gly	Ser	Ile	Leu	Ala	Ser	Gly	Glu	Ser	Asn	Phe	Lys
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Gly	Arg	Ile	Leu	Ala	Arg	Gly	Ser	Ser	Asn	Phe	Lys
1				5					10		

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Gly	Glu	Ile	Ser	Val	Gly	Glu	Ser	Lys	Phe	Phe	Leu
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<400> 27

Ala	Ser	Lys	Lys	Pro	Lys	Arg	Asn	Ile	Lys	Ala
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Ala	Ser	Lys	Lys	Pro	Lys	Ala	Asn	Ile	Lys	Ala
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Ala	Ser	Lys	Lys	Pro	Ala	Ala	Asn	Ile	Lys	Ala
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Ala	Ser	Lys	Ala	Pro	Ala	Ala	Asn	Ile	Lys	Ala
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<400> 31

Ala Ser Ala Ala Pro Ala Ala Asn Ile Lys Ala
1 5 10

<210> 32
<211> 11
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<400> 32

Ala Ser Lys Lys Ala Lys Arg Asn Ile Lys Ala
1 5 10

<210> 33
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<400> 33

Ala Lys Lys Lys Lys Arg Ile Ser Ala Asn Pro
1 5 10

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<400> 34

Pro Asn Ala Ser Ile Arg Lys Lys Lys Lys Ala
1 5 10

<210> 35

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Lys	Asn	Ser	Pro	Lys	Ala	Arg	Ile	Lys	Ala	Lys
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<400> 36

Arg	Thr	Lys	Gln	Asp	Lys	Ala	Gln	Glu	Arg	Lys
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Gly	Leu	Lys	Arg	Trp	Ala	Pro	Asn	Lys	Ala	Ala
1				5					10	

<210> 38
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<400> 38

Lys Lys Lys Lys Lys Lys
1 5

<210> 39

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Ala Lys Arg Asn Gly Pro Leu Ile Asn Arg Ile
1 5 10

<210> 40

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Ala Lys Arg Ser Val Gln Lys Leu Asp Gly Gln
1 5 10

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Ala Ser Thr Lys Arg Ser Met Gln Gly Ile
1 5 10

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<223> peptide fragment

<400> 42

Ala Thr Asn Lys Lys Thr Gly Arg Arg Pro Arg
1 5 10

<210> 43
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<212> PRT
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<400> 43

Ala Arg Ala Leu Asn Trp Gly Ala Lys Pro Lys
1 5 10

<210> 44
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<400> 44

Ala Arg Gln Lys Thr Met Lys Pro Arg Arg Ser
1 5 10

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Ala	Lys	Lys	Glu	Lys	Pro	Asn	Lys	Pro	Asn	Asp
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Ala	Arg	Lys	Thr	Lys	Ser	Arg	Glu	Arg	Lys	Asp
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<210> 47

<211> 11

<212> PRT

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<400> 47

Ala	Thr	Asn	Lys	Lys	Thr	Gly	Arg	Arg	Pro	Arg
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<223> NCAM-140

<400> 48

Met 1	Leu	Gln	Thr	Lys 5	Asp	Leu	Ile	Trp	Thr 10	Leu	Phe	Phe	Leu	Gly 15	Thr
Ala	Val	Ser	Leu 20	Gln	Val	Asp	Ile	Val 25	Pro	Ser	Gln	Gly	Glu 30	Ile	Ser
Val	Gly	Glu 35	Ser	Lys	Phe	Phe	Leu 40	Cys	Gln	Val	Ala	Gly 45	Asp	Ala	Lys
Asp	Lys 50	Asp	Ile	Ser	Trp	Phe 55	Ser	Pro	Asn	Gly	Glu 60	Lys	Leu	Thr	Pro
Asn 65	Gln	Gln	Arg	Ile 70	Ser	Val	Val	Trp	Asn	Asp 75	Asp	Ser	Ser	Ser	Thr 80
Leu	Thr	Ile	Tyr	Asn 85	Ala	Asn	Ile	Asp	Asp 90	Ala	Gly	Ile	Tyr	Lys 95	Cys
Val	Val	Thr	Gly 100	Glu	Asp	Gly	Ser	Glu	Ser 105	Glu	Ala	Thr	Val 110	Asn	Val
Lys	Ile	Phe 115	Gln	Lys	Leu	Met	Phe 120	Lys	Asn	Ala	Pro	Thr 125	Pro	Gln	Glu
Phe	Arg 130	Glu	Gly	Glu	Asp	Ala 135	Val	Ile	Val	Cys	Asp 140	Val	Val	Ser	Ser
Leu 145	Pro	Pro	Thr	Ile	Ile 150	Trp	Lys	His	Lys	Gly 155	Arg	Asp	Val	Ile	Leu 160
Lys	Lys	Asp	Val	Arg 165	Phe	Ile	Val	Leu	Ser 170	Asn	Asn	Tyr	Leu	Gln 175	Ile
Arg	Gly	Ile	Lys 180	Lys	Thr	Asp	Glu	Gly 185	Thr	Tyr	Arg	Cys	Glu 190	Gly	Arg

Ile Leu Ala Arg Gly Glu Ile Asn Phe Lys Asp Ile Gln Val Ile Val
 195 200 205

Asn Val Pro Pro Thr Ile Gln Ala Arg Gln Asn Ile Val Asn Ala Thr
 210 215 220

Ala Asn Leu Gly Gln Ser Val Thr Leu Val Cys Asp Ala Glu Gly Phe
 225 230 235 240

Pro Glu Pro Thr Met Ser Trp Thr Lys Asp Gly Glu Gln Ile Glu Gln
 245 250 255

Glu Glu Asp Asp Glu Lys Tyr Ile Phe Ser Asp Asp Ser Ser Gln Leu
 260 265 270

Thr Ile Lys Lys Val Asp Lys Asn Asp Glu Ala Glu Tyr Ile Cys Ile
 275 280 285

Ala Glu Asn Lys Ala Gly Glu Gln Asp Ala Thr Ile His Leu Lys Val
 290 295 300

Phe Ala Lys Pro Lys Ile Thr Tyr Val Glu Asn Gln Thr Ala Met Glu
 305 310 315 320

Leu Glu Glu Gln Val Thr Leu Thr Cys Glu Ala Ser Gly Asp Pro Ile
 325 330 335

Pro Ser Ile Thr Trp Arg Thr Ser Thr Arg Asn Ile Ser Ser Glu Glu
 340 345 350

Lys Thr Leu Asp Gly His Met Val Val Arg Ser His Ala Arg Val Ser
 355 360 365

Ser Leu Thr Leu Lys Ser Ile Gln Tyr Thr Asp Ala Gly Glu Tyr Ile
 370 375 380

Cys Thr Ala Ser Asn Thr Ile Gly Gln Asp Ser Gln Ser Met Tyr Leu
 385 390 395 400

Glu Val Gln Tyr Ala Pro Lys Leu Gln Gly Pro Val Ala Val Tyr Thr
 405 410 415

Trp Glu Gly Asn Gln Val Asn Ile Thr Cys Glu Val Phe Ala Tyr Pro
 420 425 430

Ser Ala Thr Ile Ser Trp Phe Arg Asp Gly Gln Leu Leu Pro Ser Ser
 435 440 445

Asn Tyr Ser Asn Ile Lys Ile Tyr Asn Thr Pro Ser Ala Ser Tyr Leu
 450 455 460

Glu Val Thr Pro Asp Ser Glu Asn Asp Phe Gly Asn Tyr Asn Cys Thr
 465 470 475 480

Ala Val Asn Arg Ile Gly Gln Glu Ser Leu Glu Phe Ile Leu Val Gln
 485 490 495

Ala Asp Thr Pro Ser Ser Pro Ser Ile Asp Gln Val Glu Pro Tyr Ser
 500 505 510

Ser Thr Ala Gln Val Gln Phe Asp Glu Pro Glu Ala Thr Gly Gly Val
 515 520 525

Pro Ile Leu Lys Tyr Lys Ala Glu Trp Arg Ala Val Gly Glu Glu Val
 530 535 540

Trp His Ser Lys Trp Tyr Asp Ala Lys Glu Ala Ser Met Glu Gly Ile
 545 550 555 560

Val Thr Ile Val Gly Leu Lys Pro Glu Thr Thr Tyr Ala Val Arg Leu
 565 570 575

Ala Ala Leu Asn Gly Lys Gly Leu Gly Glu Ile Ser Ala Ala Ser Glu
580 585 590

Phe Lys Thr Gln Pro Val Gln Gly Glu Pro Ser Ala Pro Lys Leu Glu
595 600 605

Gly Gln Met Gly Glu Asp Gly Asn Ser Ile Lys Val Asn Leu Ile Lys
610 615 620

Gln Asp Asp Gly Gly Ser Pro Ile Arg His Tyr Leu Val Arg Tyr Arg
625 630 635 640

Ala Leu Ser Ser Glu Trp Lys Pro Glu Ile Arg Leu Pro Ser Gly Ser
645 650 655

Asp His Val Met Leu Lys Ser Leu Asp Trp Asn Ala Glu Tyr Glu Val
660 665 670

Tyr Val Val Ala Glu Asn Gln Gln Gly Lys Ser Lys Ala Ala His Phe
675 680 685

Val Phe Arg Thr Ser Ala Gln Pro Thr Ala Ile Pro Ala Asn Gly Ser
690 695 700

Pro Thr Ser Gly Leu Ser Thr Gly Ala Ile Val Gly Ile Leu Ile Val
705 710 715 720

Ile Phe Val Leu Leu Leu Val Val Val Asp Ile Thr Cys Tyr Phe Leu
725 730 735

Asn Lys Cys Gly Leu Phe Met Cys Ile Ala Val Asn Leu Cys Gly Lys
740 745 750

Ala Gly Pro Gly Ala Lys Gly Lys Asp Met Glu Glu Gly Lys Ala Ala
755 760 765

Phe Ser Lys Asp Glu Ser Lys Glu Pro Ile Val Glu Val Arg Thr Glu
 770 775 780

Glu Glu Arg Thr Pro Asn His Asp Gly Gly Lys His Thr Glu Pro Asn
 785 790 795 800

Glu Thr Thr Pro Leu Thr Glu Pro Glu Lys Gly Pro Val Glu Ala Lys
 805 810 815

Pro Glu Cys Gln Glu Thr Glu Thr Lys Pro Ala Pro Ala Glu Val Lys
 820 825 830

Thr Val Pro Asn Asp Ala Thr Gln Thr Lys Glu Asn Glu Ser Lys Ala
 835 840 845

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 60

cctgtgtcaa gtggca
 76

<210> 50
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 <212> DNA
 <213> Artificial sequence

<220>
 <223> PCR primer

<400> 50
 attcacaatg acctgaatgt ccttgaagtt gatggccccg gcggccagga tggcgccgtg
 60

acagcggtaa gt
72